Nutrient Agar (i23126)

For the cultivation and maintenance of a wide variety of microorganisms.

Industry: Water / Food / Clinical

Principles & Uses

Nutrient Agar is a versatile culture medium with a relatively simple formulation designed for the growth and maintenance of non-fastidious microorganisms. It is commonly used in various fields, such as water and dairy quality testing. This medium, provides the essential nutrients required by a wide range of bacteria. Peptone, meat extract and yeast extract is a key component, supplying amino acids, long-chain peptides, vitamins, and organic nitrogen compounds for microbial growth. bacteriological agar solidifies the medium.

Nutrient Agar serves multiple purposes, including routine maintenance, checking subculture purity before further tests, and general cultivation of non-fastidious bacteria. Its applications are diverse, extending to colony counting in sanitation, medical, and industrial bacteriology. The American Public Health Association (APHA) has recommended this medium for standard water testing. Moreover, it finds use in the multiplication of microorganisms for vaccine and antigen production, as well as sensitivity and resistance testing.

Composition (gr/L)

Peptone 5, Beef Extract 1, Yeast Extract 2, Sodium Chloride 5, Agar 15.

Final pH at 25°C 7.4 ± 0.2

Preparation from dehydrated Powder

Suspend 28 g of the powder in 1 L of distilled water. Mix thoroughly. Autoclave at 121°C for 15 minutes.

Quality Control

Dehydrated Appearance: Tan, free-flowing, homogeneous.

Prepared Appearance: Light amber, very slightly to slightly opalescent.

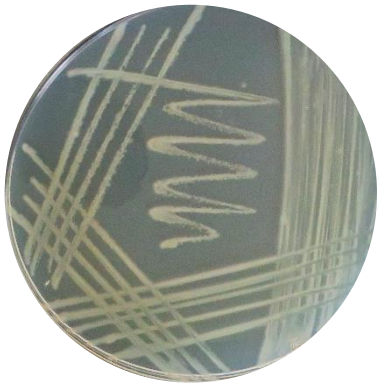
Reaction of 2.8% Solution at 25°C: pH 7.4 ± 0.2

Cultural Response

Cultural response was observed after 18-48 hours of incubation at 35 ± 2˚C.

Organism (ATCC*)	Recovery
Escherichia coli (25922)	Good
Enterococcus faecalis (19433)	Good
Pseudomonas aeruginosa (27853)	Good

*ATCC is a registered trade mark of the American Type Culture Collection.



P. aeruginosa. The background has been darkened to enhance the visibility of colonies

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.